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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 10/025,183   | 12/19/2001  | Jeffrey A. Von Arx   | 279.391US1          | 6387             |
| 21186  | 7590        | 05/25/2005           | EXAMINER            |                  |
| SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.<br>P.O. BOX 2938<br>MINNEAPOLIS, MN 55402-0938 |             |                      | MANUEL, GEORGE C    |                  |
|  |             |                      | ART UNIT            | PAPER NUMBER     |
|  |             |                      | 3762                |                  |

DATE MAILED: 05/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/025,183

Applicant(s)

VON ARX ET AL.

Examiner

George Manuel

Art Unit

3762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-42 and 46 is/are rejected.
- 7) ☒ Claim(s) 43-45 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/15/05.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**  
***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1-3, 5, 8-40 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Barreras '397 (of record).

Barreras discloses a near field antenna comprising inductor 30 and a far field antenna comprising internal antenna 11. It is inherent the far field antenna is capable of long range radio frequency wireless communication.

The examiner is interpreting an update command to comprise RF waves from coil 82 which are received by inductor 30.

Applicant's assertion that Barreras does not teach a duty cycle is without merit because the antenna 11 of Barreras clearly works according to a "duty cycle" with modulated and demodulated signals. A "duty cycle" is merely the ratio of "on" time to "total" time.

A modulated signal comprises a signal in which the amplitude of the signal changes with time from a base line comprising a carrier signal. When the amplitude of

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the modulated signal is positive with respect to the base line, the antenna is powered positively. When the amplitude of the modulated signal remains at the base line, the antenna is unpowered with respect to the modulated signal.

Regarding claims 17 and 29, Barreras discloses an implantable device 10 comprising a plurality of wireless transmitters 11 and 30. Programming information is sent from antenna 17 to antenna 11. Modulator/decoder 44 is capable of sending an outbound signal comprising a "fully charged" command through antenna 11 to antenna 21. It is inherent the device 10 is programmed to provide this function so that the antenna 11 signal is distinguished for antenna 21 and not antenna 17. Antenna 11 is selected to receive data and decoder 44 decodes received data.

Regarding claim 29, Barreras discloses a plurality of data receivers comprising antenna 11 and inductor 30.

Regarding claim 36, transmitter electronic module 76 closes the channel after a predetermined period. It is inherent the patient does not remain within proximal range of programmer unit 16 or transmitter unit 20 continuously and after a predetermined period, the devices are removed and the channel is closed.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, 7, 39, 40 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barreras '397 (of record).

Regarding claims 4 and 7, one of ordinary skill in the art would have found it obvious to modify the antenna 11 of Barreras to comprise the features of a dipole or a circumferential antenna arrangement because these are two well-known antenna configurations.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barreras '397 in view of Cubley et al '902.

Cubley et al teaches:

[0009]Antennas generally should not be placed inside a metal enclosure because the enclosure will shield the antenna thereby precluding the antenna to transmit a signal to the outside of the enclosure and precluding exterior-generated signals from penetrating the enclosure to be received by the antenna.

Regarding claim 6, one of ordinary skill in the art would have found it obvious to incorporate the antenna as part of the therapy lead because the antenna needs to be exposed external of a steel enclosure as shown in Cubley et al and the therapy lead

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readily accepts the antenna without affecting the operability of the lead for stimulation or sensing and the lead must likewise be placed external the steel implantable enclosure.

Claims 41 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barreras '397 in view of White et al '982.

White et al teach:

The controller 78 can then communicate with the field unit 16 via the interrogation transmitter 74, antenna 76, antenna 42, and the RF data-modem receiver 40 to acknowledge receipt of the requested information.

Regarding claims 41 and 42, one of ordinary skill in the art would have found it obvious to provide near and far field acknowledge signals because it is well known in communication protocol as taught by White et al to provide such acknowledgement so it can be understood data transmitted was received.

White et al '982:

The controller 78 can then communicate with the field unit 16 via the interrogation transmitter 74, antenna 76, antenna 42, and the RF data-modem receiver 40 to acknowledge receipt of the requested information.

***Allowable Subject Matter***

Claims 43-45 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.


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All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Manuel whose telephone number is (703) 308-2118.

  
George Manuel  
Primary Examiner  
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